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# NOTICE OF ALLOWANCE AND FEE(S) DUE

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06/10/2010

SHELDON MAK ROSE & ANDERSON PC 100 Corson Street Third Floor PASADENA, CA 91103-3842 EXAMINER

JEAN-LOUIS, SAMIRA JM

ART UNIT PAPER NUMBER

1627

DATE MAILED: 06/10/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/595,219	11/16/2006	David Helton	15513-1US	4859	

TITLE OF INVENTION: TETRAHYDROINDOLONE DERIVATIVES FOR TREAMENT OF NEUROLOGICAL CONDITIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	09/10/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

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A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 23676 7590 06/10/2010 Certificate of Mailing or Transmission SHELDON MAK ROSE & ANDERSON PC I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 100 Corson Street Third Floor PASADENA, CA 91103-3842 (Depositor's name (Signature (Date APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE 10/595,219 11/16/2006 David Helton 15513-1US 4859 TITLE OF INVENTION: TETRAHYDROINDOLONE DERIVATIVES FOR TREAMENT OF NEUROLOGICAL CONDITIONS APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional YES \$755 \$300 \$0 \$1055 09/10/2010 **EXAMINER** ART UNIT CLASS-SUBCLASS JEAN-LOUIS, SAMIRA JM 1627 514-254090 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_ (enclose an extra copy of this fo Advance Order - # of Copies \_ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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23676 75	23676 7590 06/10/2010			EXAMINER	
SHELDON MAI	X ROSE & ANDERS	JEAN-LOUIS, SAMIRA JM			
100 Corson Street			ART UNIT	PAPER NUMBER	
Third Floor PASADENA, CA	91103-3842		1627 DATE MAILED: 06/10/201	0	

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 209 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 209 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/595,219	HELTON ET AL.	
Notice of Allowability	Examiner	Art Unit	
	SAMIRA JEAN-LOUIS	1627	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in the or other appropriate communicement. This application is subsected by the community of the communit	nis application. If not included cation will be mailed in due course	
2. X The allowed claim(s) is/are <u>7-8, 19-20, and 22-23 (renumb</u>	<u>ered 1-6)</u> .		
3. ☐ Acknowledgment is made of a claim for foreign priority ur  a) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	been received. been received in Application cuments have been received in the following states that the been received in the following states that the been received in the following states the been received in the been	No n this national stage application fro	
<ul> <li>4. ☐ A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give</li> <li>5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must (a) ☐ including changes required by the Notice of Draftspers</li> <li>1) ☐ hereto or 2) ☐ to Paper No./Mail Date</li> </ul>	es reason(s) why the oath or d st be submitted. con's Patent Drawing Review (	eclaration is deficient. PTO-948) attached	OF
<ul> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>			
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6.  ☐ Interview Sun Paper No./M 7.  ☑ Examiner's An	mal Patent Application nmary (PTO-413), ail Date nendment/Comment atement of Reasons for Allowance	

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## **DETAILED ACTION**

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Fedrick on June 02, 2010.

The application has been amended as follows:

- 1. In claim 7, line 22, pg. 3, after "L is" <u>delete</u>

  "selected from the group consisting of —CH2<sub>m</sub>-, where m is an integer from 1 to 6, and".
- 2. In claim 7, line 27, pg. 4, after "R8" <u>delete</u> "are hydrogen, methyl, or" and insert "is".
- 3. In claim 7, line 28, pg. 4, after "R9' "delete "are both hydrogen, methyl, or" and insert "is".
- 4. In claim 7, pg. 4, <u>delete</u> "line 29" or "iv".
- 5. In claim 7, pg. 4, delete "line 30" or "v".

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- 6. In claim 7,pg. 4, delete "line 31" or "vi".
- 7. In claim 8, line 25, pg. 6, after "is" <u>delete</u> "0,".
- 8. In claim 8, line 26, pg. 6, after "R8" <u>delete</u> "are hydrogen, methyl, or" and <u>insert</u> "is".
- 9. In claim 8, line 27, pg. 6, after "R9' "delete "are both hydrogen, methyl, or" and insert "is".
- 10. In claim 8, pg. 6, <u>delete</u> "line 28" or "iv".
- 11. In claim 8, pg. 6, <u>delete</u> "line 29" or "v".
- 12. In claim 7,pg. 4, delete "line 30" or "vi".
- 13. In claim 22, line 22, pg. 8, after "L is" <u>delete</u> "selected from the group consisting of —CH2<sub>m</sub>-, where m is an integer from 1 to 6, and".
- 14. In claim 22, line 26, pg. 9, after "(i) n is" delete "0,".
- 15. In claim 22, line 27, pg. 9, after " (ii) R7 and R8 " <u>delete</u> "are hydrogen, methyl, or" and insert "is".
- 16. In claim 22, line 28, pg. 9, after " (iii) R9 and R9' " <u>delete</u> "are both hydrogen, methyl, or" and <u>insert</u> "is".
- 17. In claim 22, pg. 9, <u>delete</u> "line 29" or "iv".
- 18. In claim 22, pg. 9, <u>delete</u> "line 30" or "v".
- 19. In claim 22, pg. 9, <u>delete</u> "line 31" or "vi".

## **EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE**

Applicant's amendments to the claims filed April 23, 2010 has been fully considered. In light of the Applicant's amendments and Examiner's amendments, claims 7-8, 19-20, and 22-23 are allowed and renumbered to claims 1-6.

In light of the cancellation of claims 1-6, 9-16, 21, and 24-25, the objection to claims 7-8, 19-20, and 22-23 is hereby withdrawn.

In light of the cancellation of claims 1-6, 9-16, 21, and 24-25 and applicant's amendment, the Obviousness Double Patenting rejection is hereby withdrawn.

In light of applicant's amendment and cancellation of claims 1-6, 9-16, 21, and 24-25, the 103 (a) rejection of claims 1-6, 9, and 24 over Fick WO 03/011396 is withdrawn.

The following is an examiner's statement of reasons for allowance: Claims 7-8, 19-20, and 22-23 are drawn to a pharmaceutical composition comprising a compound having a formula (I) or a pharmaceutically acceptable salt thereof. There is no prior art disclosing applicant's pharmaceutical composition, particularly comprising the compound of formula (I) as disclosed in claim 7. The closest art is Fick et al. WO 03/011396 A1). Fick et al. teach tetrahydroindolone and purine derivatives linked to

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arylpiperazines in pharmaceutical compositions containing a pharmaceutical excipient useful in treating anti-psychotic disorders (see abstract, pg. 1, paragraph 0002, and pg. 41, paragraphs 0129-0130). Fick et al. further teach that the compounds consists of two moieties, moiety A and B which a tetrahydroindolone comprises a moiety A linked through a linker L to a moiety B, where B is an arylpiperazinyl moiety (see abstract and pg. 2, paragraph 0005). The hydrocarbyl linker is preferably with the structure (CH2)m wherein m is an integer from 1 to 6 or wherein the preferred linker has m equal to 2, 3, or 4 (see pg. 12, paragraph 0045). Fick et al. do not teach that the linker is a hydrocarbyl moiety of the formula (IV) wherein n is 1 or 2 or wherein R7, R8, R9, and R9' are ethyl. Moreover, applicant demonstrated that the instant compounds of claims 19-20 possess improved side effects profile and higher oral availability than that of Fick et al. Since the present claims require that the hydrocarbyl moiety of formula (IV) be n=1 or 2 and R7, R8, R9, and R9' to be an ethyl group, and Fick et al. alone do not render obvious the compounds of formula (I) in claim 7, claims 7-8, 19-20, and 22-23 are therefore allowable.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Claims 7-8, 19-20, and 22-23 (renumbered 1-6) are allowed.

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Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to Samira Jean-Louis whose telephone number is 571-

270-3503. The examiner can normally be reached on 7:30-6 PM EST M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J. L. /

Examiner, Art Unit 1627

06/03/10

/SREENI PADMANABHAN/

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Supervisory Patent Examiner, Art Unit 1627